

RESOLUTION 2013-17

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE NORTH SPRINGS IMPROVEMENT DISTRICT AMENDING THE RATE SCHEDULE RELATING TO WATER AND SEWER RATES, FEES AND CHARGES; PROVIDING AN EFFECTIVE DATE

WHEREAS, Chapter 2005-341, Laws of Florida, as amended (the “Special Act”) authorizes the Board of Supervisors of the District to prescribe, establish and collect rates, fees, and charges and to revise the same from time to time for the facilities and services provided by the District to include, among other things, water treatment and distribution and wastewater collection, treatment and disposal facilities; and

WHEREAS, pursuant to the Special Act and District Resolutions 89-2, 89-3, as amended, including by Resolutions 92-1, 2002-1, 2004-04, 2010-07, 2012-05 and 2013-02, the District has established the Operating Policy of the North Springs Improvement District Water and Sewer System (“Operating Policy”), which Operating Policy establishes the operating policies and rates, fees, and charges (collectively, the “Rate Schedules”) for the District’s water treatment and distribution and wastewater collection, treatment and disposal facilities; and

WHEREAS, pursuant to the authority of the Special Act and other applicable law, the District has previously undertaken or intends to undertake certain water and wastewater/reuse infrastructure improvements and facilities (“Water and Wastewater/Reuse Facilities”) which will serve properties located within the District; and

WHEREAS, a description of the Water and Wastewater/Reuse Facilities, the actual or estimated costs thereof, the method of financing such costs, a recommendation as to the connection charges to be imposed by the District relating to the Water and Wastewater/Reuse Facilities, and other provisions relating to the installation and construction of the Water and Wastewater/Reuse Facilities are set forth in the Wastewater/Reuse Connection Charge, Water Connection Charge, and Meter Charge Analysis prepared by CH2M Hill, Inc., dated August 19, 2013, a copy of which is attached hereto as Exhibit “A” (the “Connection Charge Report”); and

WHEREAS, pursuant to Section 26 of the Operating Policy, the Rate Schedules attached to and referred to therein as Schedules “A”, “B”, and “C” (the “Rate Schedules”) may

be amended from time to time in accordance with the procedures set forth therein and as required by the Special Act and other applicable law; and

WHEREAS, the purpose of this Resolution is to amend and supplement the District's Operating Policy pursuant to Section 26 thereof by amending the Rate Schedule attached to and referred to therein as "Schedule 'B', Water and Sewer Connection Charges" to prescribe, establish and amend certain connection charges applicable to water and wastewater/reuse water services consistent with the recommendations in the Connection Charge Report; and

WHEREAS, the Special Act requires that the District conduct a public hearing and advertise the same for the purpose of hearing comments and objections to a proposed amendment to the Operating Policy to modify the Rate Schedules; and

WHEREAS, on September 12, 2013, said public hearing was conducted by the District Board of Supervisors to review the amendment and supplement to the District's Operating Policy to modify the Rate Schedule attached to and referred to therein as "Schedule 'B', Water and Sewer Connection Charges";

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE NORTH SPRINGS IMPROVEMENT DISTRICT, THAT:

Section 1. The recitals above are true and correct and are hereby made a part of this Resolution.

Section 2. The District's Operating Policy, as adopted by District Resolutions 89-2 and 89-3, as amended, including by Resolutions 92-1, 2002-1, 2004-04, 2010-07, 2012-05 and 2013-02, establishing or amending the Rate Schedules of the District, is hereby amended and supplemented to modify the Rate Schedule attached to and referred to therein as "Schedule 'B', Water and Sewer Connection Charges", including amending certain connection charges set forth therein and providing for Water and Wastewater/Reuse Connection Charges, as shown on the following Table:

[SEE TABLE THAT FOLLOWS]

SCHEDULE B
North Springs Improvement District
Wastewater/Reuse and Water Connection Fees and Meter Fees

User Group	Current Water & Wastewater Connection Fee	Proposed	
		Wastewater/Reuse Connection Fee	Water Connection Fee
Connection Fee			
Single Family (per Dwelling Unit)	\$3,025.00	\$11,391.00	\$558.00
Medium/High Density (Per Dwelling Unit)	\$1,432.00	\$5,974.00	\$264.00
Commercial (Per Equivalent Residential Connection)	\$3,161.00	\$11,391.00	\$558.00
Irrigation (Per Connection)	\$900.00		\$166.00

Notes:

An Equivalent Residential Connection for Commercial Customers was defined as 25 fixture units, but will be defined as 22 fixture units.

Minimum of 1 ERC per Unit. Any fraction of an ERC will be considered one (1) ERC.

Section 3. The modification to the Rate Schedule attached to and referred to in the Operating Policy as “Schedule ‘B’, Water and Sewer Connection Charges”, as shown in the Table above, shall be effective upon the adoption of this Resolution.

Section 4. All other rates, fees and charges set forth in the Rate Schedules and not specifically addressed herein shall remain unchanged. The District reserves the right to adopt additional Connection Charges and Service Fees, including Standby Service Fees, and amend existing Connection Charges and Service Fees applicable to water and/or wastewater/reuse service.

Section 5. Pursuant to Section 26 of the Operating Policy, upon adoption, this Resolution shall become an exhibit to Resolution 89-2, and the District Manager is directed to attach this Resolution as an exhibit to Resolution 89-2 in the District’s official records.

Section 6. This Resolution shall become effective immediately upon its adoption.

PASSED AND ADOPTED by the Board of Supervisors of the North Springs Improvement District, this 12th day of September, 2013.



David L. Gray, President



Vincent Moretti, Secretary

Exhibit "A" -- Connection Charge Report

North Springs Improvement District Wastewater/Reuse Connection Charge, Water Connection Charge, and Meter Charge Analysis

PREPARED FOR: North Springs Improvement District
PREPARED BY: CH2M HILL, Inc.
DATE: September 12, 2013
PROJECT NUMBER: 477524.03.31.05

Introduction

The North Springs Improvement District (the "District" or "NSID") currently collects a combined water and wastewater connection charge from developers and customers wanting to connect to its water and wastewater system. These charges are intended to offset or recover all or a portion of the cost of providing capacity in its water and wastewater systems to serve new users in the District's service area. However, the current charges have not been updated since they were adopted by the District in 2001. The District requested CH2M HILL develop a new wastewater/reuse connection charge to reflect the anticipated costs of the wastewater and reuse facilities it is planning to construct to serve the new growth in its service area. Because of the lapse of time since the District last updated its water connection charge, it is recommended that the District adopt an updated, revised water connection charge as proposed herein to recover from new users some of the costs of the available capacity in the District's existing water treatment facilities and to reflect costs incurred to date. It is anticipated that the District will further update such revised water connection charge in the near future to reflect the cost of a new water treatment plant that is under construction. A proposed meter fee that is intended to recover the cost of installing a new water meter is also presented.

Per the requirements of the District's consumptive use permit, and other regulatory requirements, any future growth in the District's service area is expected to provide wastewater reuse or undertake other measures to conserve water. As the proposed water reuse facilities will provide service to new customers who are anticipated to require both wastewater and reuse service, a single proposed combined wastewater/reuse connection charge has been developed to recover the backbone capital costs for the combined wastewater and reuse systems.

This Technical Memorandum presents an overview of the proposed connection charges, a description of the methodology used to calculate the proposed connection charges, the unit charge calculations per Equivalent Residential Connection (ERC), the proposed combined wastewater/reuse connection charge, a proposed updated water connection charge, and a proposed meter installation charge. The proposed water connection charge would remain in effect until further updated and revised to reflect the District's investment in the new water treatment facilities.

Overview of Proposed Connection Charge

Connection charges often include the cost of installing the service connection, but in addition, the connection charge may include a capacity reservation charge. The capacity reservation charge component of the connection charge is intended to recover some or all of the cost of providing capacity in the system to serve new growth. Capital improvements to provide new capacity in a utility system must generally be constructed in large increments; therefore, system expansions are often constructed years in advance of when the added capacity will be fully utilized. Revenues generated through the assessment of capital reservation charges or connection charges are generally used to directly offset the costs of a system expansion or to repay any debt issued to finance the system expansion. The revenues may also be held to offset the costs of future system expansions. The wastewater/reuse connection charges calculated herein are designed to recover the planned investment in these

systems to provide capacity to serve new users, while the updated and revised water connection charge is designed to recover some of the costs of the available capacity in the District's existing water supply and treatment facilities. The funds collected through the wastewater/reuse connection charges should be set aside in a separate account reserved for funding the wastewater/reuse system improvements to serve new growth, or to pay debt service on loans or bonds issued to finance wastewater or reuse improvements to serve new growth. Similarly, the water connection charge revenues should be set aside in a separate account for helping to pay for the water system improvements to serve new growth, or to pay debt service on any bonds or loans issued to finance improvements to the water system to serve new growth.

The proposed wastewater/reuse connection charge shall apply to new connections throughout the District's service area. The District currently has a combined water and wastewater connection charge that it collects from new connections in the District. It is assumed for this analysis, that the District will repeal the water and wastewater connection charge that it currently collects, adopt the proposed wastewater/reuse connection charge presented herein, and adopt an updated, revised water connection charge that is designed to recover a portion of the costs of the District's existing water supply and treatment facilities needed to serve new customers. It is further assumed that the District will conduct a water connection charge analysis in the near future to further update and revise the water connection charge to reflect the cost of the water treatment facilities that are currently under construction, and the available capacity in those facilities to serve new growth.

The proposed wastewater/reuse connection charge does not include the cost of wastewater laterals and smaller reuse distribution lines within each development needed to serve the new users. Similarly, the revised water connection charge does not include the cost of smaller water distribution lines.

Overview of Proposed Meter Fee

The proposed meter fee is intended to recover the cost of installing a new water meter. The proposed charge is thus based on the cost that the District incurs to install a new water meter, which varies with the meter size.

Connection Charge Methodology

The wastewater/reuse connection charges calculated herein are based on the District's planned capital investment in the wastewater and reuse system. The estimated cost of the planned improvements is divided by the capacity of the proposed facilities to derive a unit cost per million gallons per day (mgd) of capacity in the facilities. This unit charge per mgd of capacity is then multiplied by the estimated wastewater flow of an ERC to derive the proposed connection charge per ERC. Each single-family residential connection will be charged for one ERC, while the estimated wastewater flows for commercial and multi-family users will reflect their demands relative to that of a single-family connection. Thus, if a new multi-family medium density customer was expected to have flows that amounted to 118 gallons per day (gpd), and an ERC was defined as 225 gpd, the new medium density customer would be charged for approximately 0.52 ERCs (118/225). Commercial ERCs are based on the number of water fixture units,¹ with one ERC equal to 22 fixture units.

The revised water connection charge calculation follows a similar methodology, but is based on the value of the District's existing investment in wells and water treatment facilities, and the available capacity in those facilities.

Connection Charge Calculations

This section presents the calculation of the proposed wastewater/reuse connection charge, and the revised water connection charge.

Wastewater/Reuse Unit Cost

The District is planning to construct a water reuse facility and associated facilities to provide wastewater treatment and reuse water service to anticipated new customers in its service area. These new customers will be predominantly located in the portion of the service area that was annexed into the District's boundaries

¹A water fixture unit is a measure of the potential water demand that a water-using appliance (for example, clothes washer or dish washer) or outlet (sink, bathtub, etc.) may require as measured in gallons per minute (gpm).

comprising approximately 1,418 acres (the “Annexed Area”) of an approximately 2,000-acre parcel that is commonly referred to as the “Wedge”. Exhibit 1 presents a map of the District’s service area, including the Annexed Area. While the Annexed Area represents the largest pocket of undeveloped land in the District’s service area, other land in the District’s current service area has not been developed. To provide capacity to serve these other currently undeveloped properties, the District is planning to construct a concentrate disposal line from its new water plant to the proposed new deep injection well that would be constructed as part of the new water reuse facility. This line will free up wastewater capacity to serve new customers in the portions of the District’s service area that are not in the Annexed Area that would otherwise be used to dispose of the concentrate in the County’s regional wastewater treatment facilities.

The District intends to collect the wastewater/reuse connection charge from new connections to its wastewater/reuse system throughout its service area. This charge is intended to recover the capital costs associated with providing capacity in the ‘backbone’ components of the proposed wastewater/reuse system to serve new growth. The backbone components consist of the wastewater treatment/reuse facility (“water reuse facility”), deep injection well, nature center, land for the proposed facilities, lines that will transport the wastewater from proposed developments in the Annexed Area to the proposed water reuse facility, and the reuse lines that will carry the reclaimed water from the water reuse facility to planned developments in the Annexed Area. Wastewater collection laterals, water reuse distribution lines, and associated service connections within each development are not included in the costs to be recovered through the proposed connection charges.

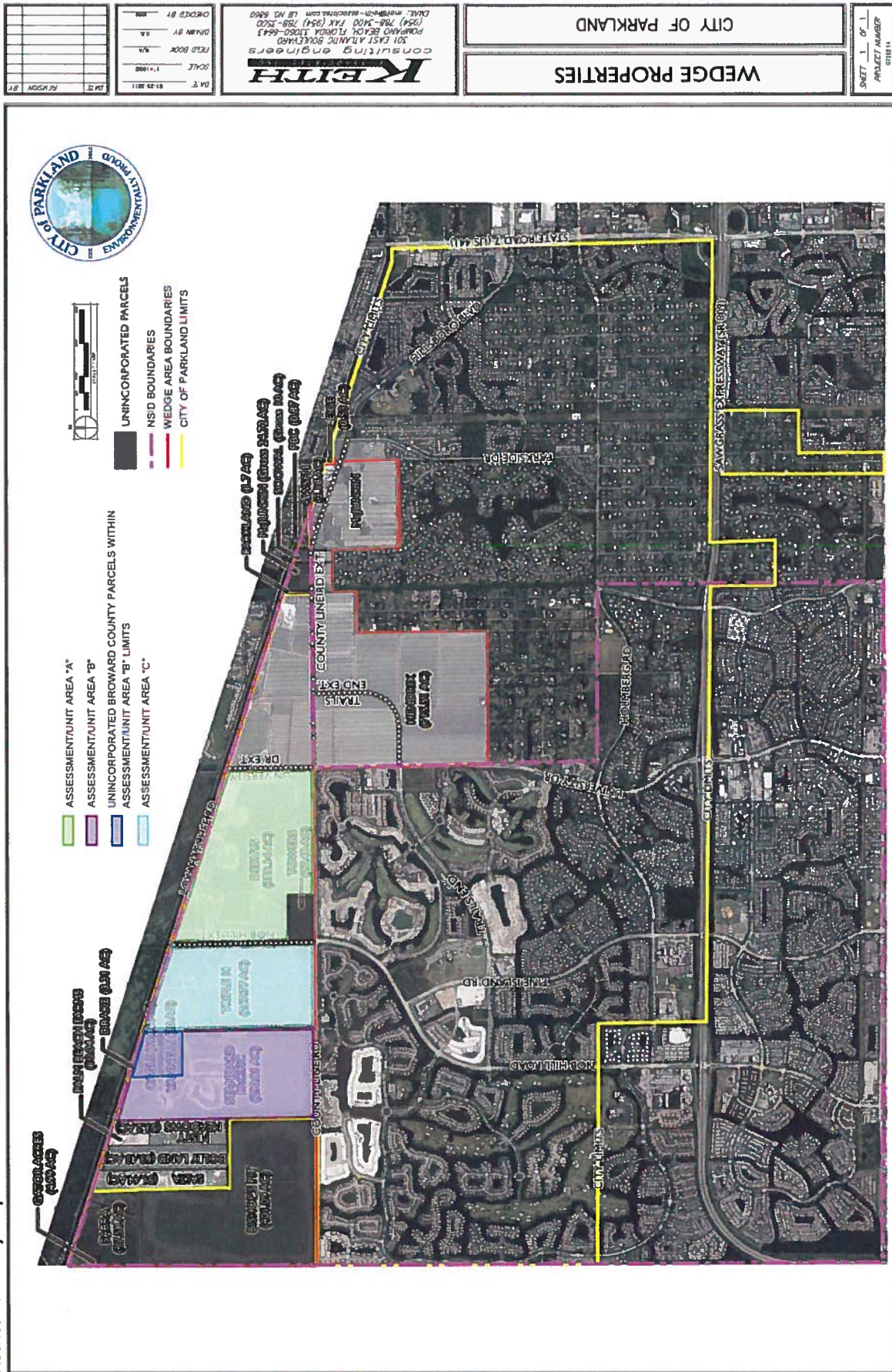
The improvements described in this report, including those related to wastewater/reuse, the existing and new water facilities, and the concentrate disposal line, will become part of the District’s combined water and wastewater/reuse system that serves the entire service area of the District.

The District is currently in litigation with Broward County relating to whether the District is required to send its wastewater flows in the Annexed Area and the rest of its service area to the County’s Regional Wastewater Treatment Facility for treatment and disposal. If the District is required to send these wastewater flows to the County for treatment, the District will need to:

- construct wastewater transmission lines to connect to the County’s system
- purchase additional capacity in the County’s wastewater transmission lines
- purchase additional capacity in the County’s North Regional Wastewater Treatment and Disposal Facilities
- purchase capacity in the County’s reclaimed water transmission lines
- construct reuse water transmission lines the District will need to transport the reclaimed water to the new development in its service area
- construct treatment facilities to provide the desired reuse water quality

While the cost of providing wastewater and reuse service to the new customers in the Annexed Area using the County’s facilities has not been estimated, it is expected that the cost of providing this service would be more expensive than the option of the District constructing its own water reuse facility. While not the District’s preferred option, the District may use the revenues generated through the connection charges to fund the construction of the wastewater and reuse facilities needed for the Broward County wastewater treatment and bulk reuse water supply option.

EXHIBIT 1
District Boundary Map



To calculate the proposed wastewater/reuse connection charge, the estimated cost of the District providing wastewater treatment and reuse service in the Annexed Area was used, as it represents the next increment of capacity being added to the District's water and wastewater/reuse system to serve new customers. Exhibit 2 summarizes the estimated cost of the planned backbone capital improvements needed to serve new users once they connect to the wastewater/reuse system. The proposed costs include land for the proposed wastewater/reuse treatment facilities and nature center. The nature center, which will primarily consist of a reuse storage pond, is being included in the proposed connection charge costs, as a storage pond will need to be constructed to provide storage capacity for the reuse system.

EXHIBIT 2

NSID Wastewater/Reuse Facilities

Estimate of Probable Land and Construction Costs

Capital Improvement	Cost
Land	\$2,300,000
Nature Center	\$1,739,870
Wastewater/Reuse Transmission Lines	\$7,327,030
Water Reclamation Facility and Deep Injection Wells	\$23,600,000
Design and Engineering	\$3,000,000
Total Cost	\$37,966,900

The capacity of the proposed wastewater facilities is estimated at 1 mgd. Approximately 25 percent of that capacity will be held in reserve per the requirements of the Florida Department of Environmental Protection regulations that requires that planning for expansions begin once the facility's actual flows reach 75 percent of its design capacity. This leaves 750,000 gpd available for customer flows.

The District currently defines an ERC as 250 gpd. However, the bulk of the new developments in the District are expected to be in the Annexed Area, where irrigation water use will be supplied through the reuse irrigation system. As such, the demand for potable water is expected to be reduced. The District has thus decided to reduce the definition of an ERC from 250 gpd to 225 gpd. As all of this water use would be for internal uses, and thus would be discharged through the wastewater system, this would also represent the expected wastewater demand per ERC and the amount of reclaimed water that would be produced per ERC.

Per the District's revised capacity requirement per ERC of 225 gpd, the 750,000 gpd would provide capacity for an estimated 3,333 ERCs (750,000 gpd/225 gpd per ERC). Dividing the estimated capital costs of the proposed facilities by the estimated number of ERCs that it can serve results in the proposed wastewater/reuse capital facility charge of \$11,391 per ERC (\$37,966,900/3,333 ERCs).

Water Unit Cost

The revised water connection charge is based on the value of the capital investment in the existing water treatment plant and its capacity. The original water plant was constructed in 1987, and has been expanded several times. The depreciated original cost of the plant, including expansions, amounts to \$16.85 million. The plant has an estimated capacity of 6.8 mgd. Thus, the unit cost per mgd of capacity is \$2.48 million (\$16.85 million/6.8 mgd). Multiplying the unit cost per mgd of capacity in the water supply and treatment facilities by the estimated demand of an ERC of 225 gpd results in a water connection charge per ERC of \$558.

Proposed Meter Fee

The District's proposed water meter fee is \$400.00 for a 5/8 x 3/4-inch meter. This charge is based on the District's cost of installing a new water meter, and will be collected when the customer requests a new meter installation. Charges for larger size meters increase with the size of the meters. Exhibit 3 lists the current and proposed meter fees.

EXHIBIT 3

NSID Current and Proposed Meter Fees*Current and Proposed Fee By Meter Size*

Meter Size	Current Meter Fee	Proposed Meter Fee
Residential		
5/8 x 3/4"	\$500.00	\$400.00
1"	\$600.00	\$600.00
1.5"	\$750.00	\$900.00
2"	\$150.00 per unit plus cost of meter	\$150.00 per unit plus cost of meter
3"	\$150.00 per unit plus cost of meter	\$150.00 per unit plus cost of meter
4"	\$150.00 per unit plus cost of meter	\$150.00 per unit plus cost of meter
6"	\$150.00 per unit plus cost of meter	\$150.00 per unit plus cost of meter
8"	\$150.00 per unit plus cost of meter	\$150.00 per unit plus cost of meter
Commercial		
5/8 x 3/4"	\$500.00	\$400.00
1"	\$600.00	\$600.00
1.5"	\$750.00	\$900.00
2"	\$150.00 per unit (ERC) plus cost of meter	\$150.00 per unit (ERC) plus cost of meter
3"	\$150.00 per unit (ERC) plus cost of meter	\$150.00 per unit (ERC) plus cost of meter
4"	\$150.00 per unit (ERC) plus cost of meter	\$150.00 per unit (ERC) plus cost of meter
6"	\$150.00 per unit (ERC) plus cost of meter	\$150.00 per unit (ERC) plus cost of meter
8"	\$150.00 per unit (ERC) plus cost of meter	\$150.00 per unit (ERC) plus cost of meter
Irrigation		
	1/2 the residential meter fee rate for the size meter required.	1/2 the residential meter fee rate for the size meter required.

Proposed Connection Charges

The proposed charge for connecting to the District's wastewater/reuse system is based on the unit cost of \$11,391 per ERC, while the proposed revised water connection cost per ERC is \$558. The wastewater/reuse connection charge is based on the estimated cost of constructing the proposed facilities to serve new growth, while the revised water connection charge is based on the value of the existing facilities per ERC. The structure of the District's existing connection charges consists of charges for Single Family Residential, Medium and High

Density Multi-family Residential,² Commercial, and Irrigation. The wastewater/reuse system connection charge includes reuse irrigation, so no separate irrigation charge is needed. However, a water irrigation charge for new irrigation users who will not be receiving reuse water service is included. Exhibit 4 lists the current combined water and wastewater connection charge, proposed connection charge for wastewater/reuse service, and proposed revised water connection charge. The exhibit shows that a single-family residential customer would pay a charge to connect to the wastewater/reuse system of \$11,391. Medium and high density multi-family connections would pay a charge of \$5,974 per dwelling unit. Commercial connections would pay a charge of \$11,391 per ERC. The number of ERCs for a new commercial connection will be based on the number of water fixture units in the new development.

The revised water connection charge would be \$558 for a single-family residential user, \$264 for a medium or high density multi-family residential customer per unit. The charge for a commercial connection would be based on their number of ERCs, which in turn would be based on their number of fixture units.

EXHIBIT 4

NSID Proposed Wastewater/Reuse Connection Charge and Water Connection Charge

Proposed Charge Per Dwelling Unit, ERC, or Connection

User Classification	Current Water and Wastewater Connection Charge	Proposed Wastewater/Reuse Connection Charge	Proposed Revised Water Connection Charge
Single Family Residential (per dwelling unit)	\$3,025	\$11,391	\$558
Medium and High Density (per dwelling unit)	\$1,432	\$5,974	\$264
Commercial (Per ERC)	\$3,161	\$11,391	\$558
Irrigation (per connection)	\$900	NA	\$166

Note:

NA=not applicable

CH2M HILL recommends that the District periodically review the costs associated with providing additional capacity in the wastewater/reuse system to serve new growth and associated connection charges as conditions and cost projections change.

Until such time as the District constructs the proposed facilities, it is anticipated that the District will send its wastewater flows to Broward County's wastewater facilities for treatment and disposal. The District has unused capacity that it has purchased in the Broward County facilities that it can use until such time as the new water reuse facility is constructed. Irrigation water supplies will be pumped from the lakes in the Annexed Area until the reuse facilities are in operation. Lake water may continue to be used to supplement the reuse irrigation water supplies after the reuse system begins operation.

The proposed revised water connection charges should be adopted, and remain in effect until the District has updated the water connection charge to reflect the costs of the new water treatment plant and capacities. CH2M HILL recommends that the District update these charges as its costs and plans for the new water treatment plant are further refined.

²Medium density is defined as 10 to 20 units per acre; high density is defined as 21 to 40 units per acre.

